UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,929	09/17/2003	Nischal Abrol	030142	6825
	7590 05/28/200 INCORPORATED	9	EXAMINER	
5775 MOREHO	OUSE DR.		KARIKARI, KWASI	
SAN DIEGO, O	A 92121		ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
			05/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com kascanla@qualcomm.com nanm@qualcomm.com

Office Action Summary		Application No.	Applicant(s)				
		10/665,929	ABROL ET AL.				
		Examiner	Art Unit				
		KWASI KARIKARI	2617				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHICH - Extens after S - If NO p - Failure Any re	PRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DATE ions of time may be available under the provisions of 37 CFR 1.13 IX (6) MONTHS from the mailing date of this communication. Deriod for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, ply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status							
1)⊠ F	Responsive to communication(s) filed on <u>17 Fe</u>	ebruary 2009.					
•		action is non-final.					
3)□ 8	<i>,</i> —						
c	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositio	on of Claims						
4)🛛 (Claim(s) <u>1,5-7,9-15,20,22,23,25,28 and 29</u> is/a	re pending in the application.					
4	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) 🗌 (Claim(s) is/are allowed.						
6) Claim(s) <u>1,5-7,9-15,20,22,23,25,28 and 29</u> is/are rejected.							
7) 🗌 (Claim(s) is/are objected to.						
8) 🗌 (Claim(s) are subject to restriction and/or	election requirement.					
Applicatio	on Papers						
9)□ ⊤	he specification is objected to by the Examine	r.					
•	he drawing(s) filed on is/are: a)☐ acce		Examiner.				
	Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ur	nder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notice 3) Informa	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date 01/23/2009.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

Application/Control Number: 10/665,929 Page 2

Art Unit: 2617

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed on 02/17/2009 with respect to the pending claims in the remarks, have been considered but are moot in view of the new ground(s) of rejection necessitated by the new limitations added to claims 1, 7, 20, 23 and 28-29. See the rejection below in the pending claims for relevant citations found in Madour, Bertrand and Madour II disclosing the newly added limitations.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 5-6, 20, 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madour (US 20030053431 A1), (hereinafter, Madour) in view of Bertrand et al. (U.S 6,876,640), (hereinafter, Bertrand).

Regarding claims 1, 20 and 28, Madour discloses a wireless communication device/method/means (= terminal 205, see Fig. 2) comprising:

a connection table for storing one or more connection identifiers, wherein a connection identifier corresponds to a Packet Coordination Function (PCF) that has been previously visited by the wireless communication device (= terminal stores PZID of visited PZ, see Pars. 0005, 0008, 0028-29 and 0031-32) the connection table indicating whether a connection between the wireless communication device and each PCF is active (see [0037]);

a receiver for receiving a connection identifier (see Pars. 0);

a processor for <u>determining</u> if the received connection identifier is contained in the <u>connection table</u>, and for delivering the received connection identifier to the connection table for storing when the received connection identifier is not contained in the connection table (see Pars. 0032, 0034 and 0037); and

a transmitter for sending a registration in response to the received connection identifier when the received connection identifier is not contained in the connection table (see Pars. 0006-10, 0028-29, 0033-35 and 0037); and wherein the processor is further operable to determine that the registration is not needed if the processor determined that received connection identifier is contain in the connection table (= terminal 205).

does not originate origination message since broadcasted PZID is the same as the PZID stored in terminal 205, see [0037]).

Madour explicitly fails to disclose "a corresponding timer, wherein the processor removes a connection from the connection table in response to an expiration of the corresponding timer; and wherein the processor resets the corresponding timer in response to activity on a connection corresponding to the connection identifier".

However, **Bertrand** which is an analogous art discloses "a corresponding timer, wherein the processor removes a connection from the connection table in response to an expiration of the corresponding timer; and "wherein the processor resets the corresponding timer in response to activity on a correction corresponding to the connection identifier" (see col. 9, lines 1-38).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Bertrand with the system of Madour for the benefit of achieving a system that reduces radio resource by preventing the creation and renegotiation of PPP session whenever mobile station moves different PDSN (see Bertrand, col. 3, lines 20-30).

Regarding **claim 5**, as recited in claim 3, Madour further discloses the wireless communication device wherein, the processor clears the connection table when a connection is received corresponding to a Packet Data Serving Node (PDSN) that is different from a PDSN corresponding to a previously stored connection (see Pars.

0032, 0034 and 0037).

Page 5

Regarding claim 6, as recited in claim 3, Madour further discloses the wireless communication device wherein, the processor clears the connection table when a clear table message is received by the receiver (see Pars. 0032, 0034 and 0037).

Regarding claim 22, as recited in claim 20, Madour further discloses the method further comprising: receiving a clear table message; and clearing the connection table in response to the clear table message (see Pars. 0032, 0034 and 0037).

3. Claims 7, 9-15, 23, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertrand in view of Madour (US 6,834,050 A1), (hereinafter Madour II).

Regarding claims 7, 23 and 29, Bertrand discloses a Packet Data Serving Node (PDSN) /method, operable with a plurality of PCFs (RN 108) via a corresponding plurality of connections (112), each PCF operable to communicate with one or more wireless communication devices (102), the PDSN further operable with a network (118) for directing data for transmission to one or more wireless communication devices (see Fig. 1), comprising:

a connection table for storing a plurality of connection sets (= PPP register 126 could be located any where in system 100, see col. 5, lines 50-67 and col. 6,

lines 10-20), each connection set comprising one or more connections associated with a wireless communication device (= R-P interface and PPP connection, see Fig. 1);

a processor (= inherent feature of RN 108) for selecting a connection from the one or more connections in a connection set associated with a wireless communication device for which data is directed from the network (= complete negotiation of PPP context of PPP session, see col. 1, lines 65-66 and col. 8, lines 12-59); and

a buffer for receiving data from the network that is designated for delivery to a wireless communication device, storing the received data until the wireless communication device is located, <u>based on an active connection</u>, on one of the connections in the connection set and transmitting the stored data on the selected connection to the wireless communication device (see col. 1, line 65-67; col. 2, lines 49-col. 3, line 43; and col. 7, lines 1-19); but fails to teach wherein a first timer in the PDSN and a second timer in the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer.

However, Madour II teaches "wherein a first timer in the PDSN and a second timer in the wireless communication device correspond to each of the connections and wherein the first timer is set to expire after the second timer (see col. 3, lines 37-54 and col. 6, lines 27-50).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour II with the system of Bertrand for the benefit of

achieving a system that includes hash function of system selection (see col. 4, lines 60-65).

Regarding **claim 9**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), wherein an active connection identifier is stored in the connection table to identify zero or one active connection for each wireless communication device (see col. 6, lines 43-64).

Regarding **claim 10**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects all of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (= creation of new session, see col. 6, lines 43-64).

Regarding **claim 11**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects a subset of the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 6, lines 43-64).

Regarding **claim 12**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects the most recent active connection from

the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (= previous PPP context are used, see col. 7, lines 1-19).

Regarding **claim 13**, as recited in claim 9, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor selects one or more connections randomly from the connections associated with a wireless communication device for transmission to the wireless communication device when no connection for the wireless communication device is identified as active (see col. 7, line 57- col. 8, lines 34).

Regarding **claim 14**, as recited in claim 7, Bertrand discloses the Packet Data Serving Node (PDSN), further comprising a plurality of timers corresponding to the plurality of stored connections, wherein the processor removes a connection from the connection table upon expiration of one of the plurality of timers associated with the connection (col. 7, lines 32-56).

Regarding **claim 15**, as recited in claim 14, Bertrand discloses the Packet Data Serving Node (PDSN), wherein the processor resets one of the plurality of timers in response to an activity indicator associated with the mobile station on the corresponding connection (see col. 6, lines 43- 64).

Regarding **claim 25**, as recited in claim 23, Bertrand fails to disclose "maintaining a plurality of timers corresponding to the plurality of stored connections and removing a connection from the connection table upon expiration of one of the plurality of timers associated with the connection" (col. 7, lines 32-56).

However, Madour II teaches "maintaining a plurality of timers corresponding to the plurality of stored connections and removing a connection from the connection table upon expiration of one of the plurality of timers associated with the connection" (see col. 3, lines 37-54 and col. 6, lines 27-50).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Madour II with the system of Bertrand for the benefit of achieving a system that includes hash function of system selection (see col. 4, lines 60-65).

CONCLUSION

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. SEE MPEP 2141.02 [R-5] VI. PRIOR ART MUST BE

Application/Control Number: 10/665,929 Page 10

Art Unit: 2617

FROM THE CLAIMS: A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). >See also MPEP §2123.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of 33the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-T (9am - 7pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8566. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Application/Control Number: 10/665,929 Page 11

Art Unit: 2617

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kwasi Karikari/

Patent Examiner: Art Unit 2617.

/Charles N. Appiah/ Supervisory Patent Examiner, Art Unit 2617